

# **EXHIBIT 6**

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS**

CARDIACSENSE LTD.,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Case No. 1:24-cv-01505-ADA

**PLAINTIFF CARDIACSENSE LTD'S OPPOSITION TO DEFENDANT GOOGLE  
LLC'S RULE 12b(b)(6) MOTION TO DISMISS**

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## ***I. INTRODUCTION***

Plaintiff CardiacSense LTD (“Cardiac”), by its undersigned counsel, respectfully requests that this Court deny Defendant Google LLC’s (“Google”)’s Motion to Dismiss Pursuant to Rule 12(b)(6). Contrary to Federal Circuit precedent, Google overgeneralizes Cardiac’s claims hoping that the exceptions to § 101 swallow the rule. The crux of Google’s argument is that claims of the Asserted Patent are nothing more than “do-it-on-a-computer” claims. Motion at 1. The claims of the Asserted Patent are nowhere near that general. Google fails to provide detailed analysis on each of Cardiac’s claims and instead selects its own “representative” claim, and over generalizes that claim, while ignoring other separately patent-eligible features of Cardiac’s multiple disclosed embodiments as recited in the other independent and dependent claims.

The ’998 patent claims are patent-eligible under § 101 because the personal device uses specific physical components combined in a unique way and provides a specific, improved form of collecting relative limb movement data in real-time that is used to provide simultaneous feedback to a trainee in a manner not achievable without the aid of the claimed physical device. This technological improvement addresses technological problems related to communication between a trainer and a trainee that was not solved until the invention of the ’998 patent.

Because Google has failed to establish by clear and convincing evidence that each of the 16 patent claims are invalid under § 101, the Motion to Dismiss should be denied.

## ***II. STATEMENT OF FACTS***

The ’998 patent claims a personal device having specific recited components, connected in a specific manner with specific functional interactions for measuring, processing, analyzing and displaying data of training activity of a trainee in a manner not achievable by a human. These claims cannot be oversimplified to “the abstract idea of collecting, analyzing, transmitting, and presenting/displaying information” as wrongly asserted by Google. See Motion at 3. The ’998

patent solves the problem of facilitating enhanced communication during a training activity that is inhibited by inherent physical communication barriers. (See '998 patent at 3:57-64.) For example, when a swimmer engages in a training session, inherent physical communication barriers exists because the swimmers are submerged underwater during swimming. *Id.* This problem becomes exacerbated when a group of swimmers engage in a training session together. Monitoring and coaching a plurality of swimmers on their technique while each swimmer is moving underwater is nearly impossible even if each swimmer has an individual trainer assigned to coach him.

The '998 patent provides an inventive personal device to solve these problems. The personal device includes an attachable sensing unit adapted to repeatedly measure, during the training activity, parameters associated with movement of the trainee's body part. (*Id.* at 3:65-4:14.) The personal device is adapted to receive data from the sensing unit and calculate specific training activity such as instantaneous speed, hand or leg lifting height of strokes, distance traveled for each stroke, and comparative results to other participants. (*Id.* at 12:40-43, Fig. 5-7.) The patent provides multiple embodiments of how this specific training data can be relayed to trainees in real-time, such as through vibratory pulses or audio signal to earphones. (*Id.* at 13:26-32; 13:52-58, Fig. 8.) These unique parameters of measuring individual body part movement relative to another body part were not collected and calculated in prior art devices even when using similar sensors. The patent discloses a novel use and implementation of such sensing devices, reflecting a clear novel technological implementation of measuring devices.

The '998 patent has 16 claims, including 6 independent claims, each directed toward a different embodiment of the personal device. Independent claim 1 identifies a personal device “for measuring a training activity of a trainee having a body part which moves and changes its location and orientation, during said training activity, this movement at least partially defining said

training activity” which is a real-world, non-abstract event, involving the following elements:

- (a) a sensing unit adapted to repeatedly measure, during said training activity, parameters associated with the movement of said body part and characterizing the location and orientation of said body part relative to its initial location and orientation, and wherein said sensing unit comprising at least accelerometer means, a compass and optionally gyroscope means, said accelerometer means being adapted to measure linear acceleration of said body part along three axes, said gyroscope means being adapted to measure angular acceleration of said body part around said three axes, and said parameters being at least linear and angular acceleration values;
- (b) means for attaching the sensing unit to said body part; and
- (c) a processor adapted to receive from the sensing unit said parameters, and to calculate based thereon, data indicative of said training activity, said data including at least the location and orientation of said body part for each of the measurements.

(’998 patent at Claim 1, emphasis added.)

The measurements taken during the training activity by the sensing unit are real-world events of relative body movement parameters being measured by real-world devices. Further, the processor receives the real-world parameters and calculates data indicative of the training activity that is used to provide improved training techniques by sending real-time unique relevant information feedback to trainees which was not proposed or implemented in prior art devices. Therefore, claim 1 of the ’998 patent covers a patent-eligible, non-abstract apparatus that improves training activities for trainees and their coaches.

Google does not adequately address each independent claim or their respective dependent claims, which add further patent-eligible-conferring limitations. Instead Google simply selects claim 12 and designates it as “representative” without demonstrating that the claim is representative of all claims. *See* Motion at 3-4. For independent claims 1, 8, 9, 10, and 11, and dependent claims 2-7, and 13-16, Google does not provide analysis of the claims at all, but simply asserts without proof that each claim is similar to “representative” claim 12. Because each claim recites unique elements, each claim and each element must be analyzed before they can be



invalidated under the clear and convincing standard: claims 1-7 (specific types of data and results, further measurements of the trainee, a presentation unit, a screen to display training instructions to the trainee based on the data, and predetermined rules for instructing trainees); claim 8 (additional sensing units for additional body parts of the trainee); claim 9 (an alternate embodiment of the sensing unit); claim 10 (a presentation unit comprising a vibrating element to direct the trainee); claim 11 (a presentation unit comprising an earphone to transmit audio signal to the trainee); and claims 13-16 (a separate computer to monitor training data, display training data in real-time, and display data for a plurality of trainees). The '998 patent claims identify a training device to provide real-time feedback and improved training technology and therefore recite patent eligible subject matter. Defendant has not satisfied its burden to show by clear and convincing evidence that each of those claims is directed to patent-ineligible subject matter.

### ***III. LEGAL STANDARDS***

The Patent Act grants patent protection for a broad range of innovations, including “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. In *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208 (2014), the Court distinguished between claims directed to the “building blocks of human ingenuity” (ineligible) and claims that integrate such building blocks in a transformative way to yield a patentable invention. *Id.* at 217. The physical device of the present invention is such a device that integrates building blocks in a transformative way.

*Alice* provided a two-step test. In step one, a court “determine[s] whether the claims at issue are directed to one of those patent-ineligible concepts [i.e., laws of nature, natural phenomena, and abstract ideas].” *Alice*, 573 U.S. at 217. If the claims are not directed to an ineligible concept, the claims automatically satisfy §101. It is only when they are directed to one of those patent-ineligible concepts that the court moves to step two “to determine whether the

additional elements transform the nature of the claim into a patent-eligible application,” also known as an inquiry into “inventive concept.” *Id.* (citations omitted). In both steps, the Court must assess the claims “as a whole.” *Id.* at 218 n.3, 225. Indeed, it is “inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements” when evaluating patent eligibility. *Diamond v. Diehr*, 450 U.S. 175, 188-89 & n.12 (1981).

Although patent eligibility under §101 is a question of law, subsidiary factual disputes exist that may preclude a dismissal on the pleadings. *See Aatrix Software Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121 (Fed. Cir. 2018); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018) (“The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact”).

Patents are presumed valid and the defendant bears “a heavy burden of persuasion,” on the issue of validity, which must be met by “clear and convincing evidence.” *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 100-03 (2011); *Berkheimer*, 881 F.3d at 1368; 35 U.S.C. § 282(a). This presumption attaches to the issue of patent eligibility. *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019). At this stage, “a patent claim can be found directed towards patent-ineligible subject matter if the *only* plausible reading of the patent must be that there is clear and convincing evidence of ineligibility.” *Bascom Global Internet Servs. v. AT&T Mobility*, 107 F. Supp. 3d 639, 645 (N.D. TX. 2015), quoting *Wolf v. Capstone Photography, Inc.*, No. 13-CV-9573, 2014 WL 7639820, at \*5 (C.D.Cal. Oct. 28, 2014) (emphasis in original). “[T]o prevail on a Rule 12(b) motion to dismiss [for patent ineligibility], the movant needs to overcome both a factual deck stacked against it and a heightened burden of proof.” *Slyce Acquisition Inc. v. Syte - Visual Conception Ltd.*, No. 19-CV-00257, 2020 WL 278481, at \*4 (W.D. Tex. Jan. 10, 2020) (“[R]esolving a patent’s § 101 eligibility is rarely appropriate as a Rule 12(b) motion to dismiss.”).

#### IV. ARGUMENT

##### A. Defendant May Not Simply Designate Claim 12 As Being “Representative.”

Defendant’s Motion fails at the outset because it has not presented any evidence as to the majority of the claims in the ’998 patent. Instead, Defendant has selected one claim (Claim 12) and declared without analysis that it is representative of all claims. Motion at 3-4. Defendant has not presented a comparison of all the other claims to show that the claims are indeed subsumed in or somehow represented fully by Claim 12. There is nothing other than the Defendant’s unsupported statement to indicate that Claim 12 should be considered representative for the purposes of invalidating all 16 claims of the ’998 patent. And without presenting evidence that this statement is true, Defendant cannot prevail under the heightened standard of proof.

The Federal Circuit has not given defendants *carte blanche* to pick a single claim and present argument only as to that claim for purposes of a challenge under Section 101. See Motion at 4, citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). The *Content Extraction* court pointed out that selecting a representative claim was appropriate in that case because the patent owner never asserted in its opposition that the district court should have differentiated any of the other claims. *Id.* Moreover, the court found evidence to show that the claims in the Content Extraction patent were “substantially similar and linked to the same abstract idea.” As detailed below, neither set of facts is applicable here.

Defendant also cites *Cleveland Health* (which analyzed five claims) for a similar proposition. See Motion at 4, FN 2, citing *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017.). However, in *Cleveland Clinic*, the court found that each of the claims were “substantially similar and linked to the same’ *law of nature*,” as the five representative claims presented in the motion. *Id.*, emphasis added. First, the *Cleveland Clinic* patents had to do with “the correlation between MPO in the blood and the risk of [cardiovascular

disease],” which is a law of nature. *Id.* at 1358. There is no law of nature being analyzed with respect to the ’998 patent such that the *Cleveland Clinic* approach might be facially appropriate. Second, unlike in *Cleveland Clinic*, there has been no showing by the Defendant that all of the claims are “substantially similar.” Instead, Defendant has simply declared that all elements of the other asserted independent claims are found in claim 12.<sup>1</sup> Motion at 4. There is no chart, no comparison, not any sort of an attempt to show that claim 12 of the ’998 patent is actually representative of all of the other claims in the patent.

It is not true that Google “*primarily* analyzes claims 12 below,” as Defendant asserts. Motion at 4, emphasis added. Google *only* analyzes claim 12. The only mention of any of the other 15 claims anywhere in the brief is found in footnote 2 that all of the elements are somehow found in claim 12. This conclusory statement falls far short of presenting clear and convincing evidence that claims 1-11 and 13-16 are directed to patent-ineligible subject matter.

The Court should reject Defendant’s over-simplification as an attempt to circumvent the high standard of proof. Although the claims share some similar elements, they are not identical, and those allegedly “similar” portions contain different elements that must be analyzed individually before the claim can be declared invalid. Courts “must be careful to avoid oversimplifying the claims by looking at them generally and failing to account for the specific requirements of the claims.” *McRO Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016). “[D]escribing the claims at such a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to §101 swallow the rule.” *Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016) (emphasis added). Instead, the

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<sup>1</sup> Defendant entirely ignores independent claims 8, 9, and 11. Should any of the other claims be held invalid under Section 101, Plaintiff should be allowed to amend the Complaint to allege infringement of claims 8, 9, and 11, which are not at issue in Defendant’s Motion.

Court must “articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful.” *Thales*, 850 at 1347.

Defendant fails to account for the differences between the claims and merely states that these different embodiments are “substantially similar” and claim 12 “generally includes all elements of the other asserted claims.” Motion at 4, FN 2. However, it is not enough for Defendant to merely conclude without any substantive analysis that additional elements that have only been partially recited in the summary chart are not “inventive concepts.” It is Google’s burden to account for the “specific requirements of the claims” by fully reciting the relevant language and providing a specific argument that takes into account the entire claim. *McRO*, 837 F.3d at 1313. Defendant has failed to meet its burden.

Finally, because this is before the Court on a motion to dismiss, Google has not come close to showing by clear and convincing evidence that the “only plausible reading” of all 16 claims is that they are directed to abstract concepts. *Bascom*, 107 F. Supp. at 645. The claims each recite real-world, non-abstract and patent eligible subject matter. Because the claims meet the first *Alice* step, the Court should deny Google’s motion outright. The Motion to Dismiss must also fail as to each of the claims that are not presented for analysis in Defendant’s Motion.

***B. Comparison Of The ‘998 Patent To Unrelated Patents Is Inappropriate.***

Furthermore, it is legally and factually erroneous for Defendant to declare claim 12 to be representative and then compare it to another purportedly “representative” claim from a patent wholly unrelated to this case. A superficial comparison of one claim of the ’998 patent to claims in the *iLife* and *Electric Power Group* cases cannot constitute clear and convincing evidence that the ’998 patent claims are directed to ineligible subject matter.

First, Defendant takes one claim analyzed in *iLife Techs., Inc. v. Nintendo of Am., Inc.*, 839 F. App’x 534 (Fed. Cir. 2021), and asserts that it is dispositive of the eligibility of the claims in

the '998 patent. *See* Motion at 6, et seq. Defendant then highlights claims containing obviously different elements and groups them together as if they are identical for purposes of patentability analysis. For example, Defendant's chart begins by assuming that "a body" in *iLife* and "a body part" have the same meaning. But Defendant does not share the specification of the *iLife* patent which makes it clear that the "body" is not a reference to a human body part (as in the '998 patent) but more generally to an object (body) in motion. *Id.* at 536. Thus, the *iLife* patent was concerned with a very general concept of movement and generic sensors untethered to a real-world implementation; *i.e.* it merely recites a sensor and processor that generates tolerance indicia.

By contrast, the '998 patent recites a technological solution to a real-life problem and claims a "*personal device for measuring a training activity of a trainee having a body part which moves and changes its location and orientation, during said training activity.*" ('998 patent at Claim 1.) It recites specific sensors which are to be employed to generate the requisite data to be calculated and processed and to what end—measure parameters associated with movement of body part. For example, the invention can generate "vibratory pulses" to the particular limbs of a trainee and can increase the strength of the vibratory pulses so that "the higher the vibration frequency that is generated enabl[es] the participant to adjust his/her movement in a manner such that the vibrations subside." ('998 patent at 13:62-66.) These are all important considerations because Defendant's facile comparison disregards a key consideration in patent eligibility having to do with whether the invention involves "routine" and "conventional" activities. While measurement of movement in general (the *iLife* patent) might be viewed to be routine and conventional, the particular application of measuring and reporting relative movement of a particular body part and providing real-time feedback to the athlete is not conventional and routine, as discussed previously.

The dissimilarities do not end there. The green text of the chart shows that the '998 patent

discussing numerous movements and parameters that are being measured and reported, while the *iLife* patent discusses only acceleration. Motion at 6, e.g. Likewise, the chart (orange text) misrepresents the function of the '998 patent's computer that receives the data and instead presents this element as if it were coextensive with the part that transmits the data (*iLife* patent). The *iLife* comparison chart also fails to account for the particular manner of presenting the data to the trainee in real time (element (d)) while also presenting the data to a user (such as a coach, element (e)). These last two elements are particularly useful in showing that the patent is not merely addressing “routine” or “conventional” activities, as it presents unique solutions to the problem of providing real-time results while the athlete (trainee) is performing the movement.

In relying on *iLife*, Defendant fails to provide the important context that the *iLife* decision provides where the court notes that it has upheld the patent-eligible nature of a number of patents relating to “system[s] that incorporates sensors and improved techniques for using raw sensor data” because those patents focused on specific means and allowed immediate action to be taken. *iLife Techs.*, 839 F. App'x at 536-37 (Fed. Cir. 2021). Plaintiff's sensing unit and processor are not simply for collecting data, as in *iLife*, but instead define which specific data is to be calculated and with which sensor—and are integrated into providing real-time feedback to the trainee so that the trainee may improve his performance during the activity.

The Federal Circuit analyzed other patents in the *iLife* case that were determined to be “not abstract,” including one that was directed to a heart monitor device:

Likewise, the claims in *CardioNet* were not abstract because they focused on a specific means or method that improved cardiac monitoring technology, improving the detection of, and allowing more reliable and immediate treatment of, atrial fibrillation and atrial flutter.

*Id.*, citing *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358 (Fed. Cir. 2020). The claims of the '998 patent are more similar to these “not abstract” claims of the heart monitor in *CardioNet*

because they do recite specific means in the device, and they do allow immediate treatment in the form of immediate feedback to both the athlete and the coach.

Defendant's attempt to invalidate the claims of the '998 patent by comparing claim 12 to the patent in *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1356 (Fed. Cir. 2016), also fails. *See* Motion at 9, et seq. First, the *Electric Power Group* patent is directed to a method, not a physical device. Second, the *Electric Power Group* patent has no relation to detecting multiple different types of motion and presenting the data to a trainee and a coach while the activity is still happening. The fact that Defendant has highlighted large portions of text in matching colors does not make those passages analogous. And, as the Defendant points out, *Electric Power Group* merely claims a method to collect data, which can be viewed as "within the realm of abstract ideas." Motion at 10. But as described herein, the '998 patent does not merely present an abstract idea of method relating to data. It claims and describes a particular system that not only measures and reports data, but provides instant, usable feedback to an athlete (trainee) still performing the activity. Even when (improperly) compared to the claims of the *Electric Power Group* patent, it is apparent that the Defendant has not met its burden of showing that the claims of the '998 patent are ineligible by the clear and convincing standard of proof.

### ***C. Google Fails to Establish Step One of Alice***

#### ***i. Controlling Precedent Supports Patentable Subject Matter.***

Controlling precedent shows how the claims are directed to real-world subject matter of improving sports performance. The decision in *Thales Visionx Inc. v. United States*, 850 F.3d 1343, 1347 (Fed. Cir. 2017), established that patents using physical measurements to improve performance are patent-eligible. There, the patent "provide[d] a method that eliminates many 'complications' inherent in previous solutions for determining position and orientation of an object on a moving platform." *Id.* at 1348. The Federal Circuit reversed the district court dismissal,



holding that “the claims are directed to systems and methods that use inertial sensors in a non-conventional manner to reduce errors in measuring the relative position and orientation of a moving object on a moving reference frame.” *Id.* at 1348–49. The Court determined that “[t]he claims specify a particular configuration of inertial sensors and a particular method of using the raw data from the sensors in order to more accurately calculate the position and orientation of an object on a moving platform.” *Id.* at 1349.

Here, Cardiac’s patent claims recite what *Thales* found to be patentable: a personal device that eliminates the guesswork of improving sports performance and instead provides real time feedback to a trainee that allows for in-activity adjustment for optimal performance. (See ’998 patent at 13:45-48, 62-66.) This is far from the type of task that could be performed by humans with pencil and paper, and might thus be considered patent-ineligible.

As in *Thales*, each of the independent claims of the ’998 patent specify a particular configuration of inertial sensors and a particular method of using the raw data from the sensors to more accurately calculate the position and orientation of an object. Yet, the ’998 patent goes even further by using these calculations to provide real-time feedback to a trainee to improve training methods in ways that conventional methods and systems could not.

Each of independent claims 1, 8, 9, 10, 11 and 12 calculate “data indicative of said training activity.” As the specification makes clear, this data is not conventional data, but instead highly specific training data measured from the activity of the trainee. For example, the data “may relate to statistics and summary results for swimming sessions or laps” which can include “instantaneous speed during the laps, hand or leg lifting height for each stroke, distance traveled for each stroke, comparative results to other participants.” ’998 patent, 12:34-48.

The claims of the ’998 patent do not stop with the mere collection of this data. Claims 10,

11, and 12 further include a presentation unit that can provide vibratory pulses or audio signals to an earphone so that the trainee may receive real-time feedback that is based on the data collected from the sensing unit.

These features provide more accurate feedback for the trainee that is not possible without the '998 invention. Conventional methods of videotaping a routine for later viewing or having a coach watch and yell out commands are unable to provide the instantaneous feedback to the trainee that is possible with the '998 invention. This improvement is recognized in the '998 specification:

a vibrating element that generates vibratory pulses and *directs these to the skin of the participant 2 to enable the participant to feel the vibrations*. Optionally, the frequency and/or amplitude of the vibrations may provide a measure of the data D and/or instructions I, according to a preset convention. For example, the more a particular parameter P of the particular body part to which the device 10 is attached deviates from a particular optimum, the higher the vibration frequency that is generated, *enabling the participant to adjust his/her movements in a manner such that the vibrations subside*. This particular form of presentation unit 14 enables the same to provide *direct feedback information to the same part of the body as the device 10* which comprises the presentation unit 14 is fitted, and allows multiple units 10, fitted onto different body parts of the same participant 2, to *simultaneously provide such information as required in a manner that is easily and readily understandable by the participant 2*.

'998 patent, 13:52-14:6, emphasis added.

Likewise, the *US Synthetic* case that was issued on February 13, 2025 is instructive on this point. *US Synthetic Corp. v. International Trade Commission*, Case No. 23-1217 (Fed. Cir. Feb. 13, 2025) (Dyk, Chen, Stoll, JJ.), attached as **Exhibit A**. The asserted claims in *US Synthetic* are directed to a composition of matter (a superabrasive diamond composition) itself and not the method of manufacturing the matter. *Id.* at \*8. The ITC determined that the asserted claims are patent ineligible because they violate the abstract-idea exception to 35 U.S.C. § 101. *US Synthetic* at \*3. Patent owner appealed the patent ineligibility ruling. *Id.* at \*4.

On appeal, the Federal Circuit determined that, under *Alice* step one, the patent claims are patent-eligible because they are directed to a specific technological improvement rather than an

abstract idea. *Id.* at \*14. The analysis focuses on “as a matter of law whether a patent claim is directed to a specific implementation of an idea or merely just the idea itself.” *Id.* at \*17. Patent eligibility is found where the claimed invention provides a tangible technological advancement for an improved method for manufacturing the composition of matter. *Id.* at \*19. The claimed invention included an innovative combination of components (diamond, cobalt catalyst, and substrate) in conjunction with particular dimensional information (grain size) and material properties (magnetic saturation) to achieve an improved composition. Thus, US Synthetic’s patent claimed a specific and inventive technological improvement rather than an abstract idea.

Applying *Alice* step one, we conclude that the asserted claims of the ’502 patent are not directed to an abstract idea. Rather, the claims are directed to a specific, non-abstract composition of matter—a PDC—that is defined by its constituent elements (i.e., diamond, cobalt catalyst, sub-strate), particular dimensional information (i.e., grain size, lateral dimension of the diamond table), and quantified material properties (i.e., coercivity, specific permeability, and specific magnetic saturation), whereby the material properties correlate to the diamond table’s structure and thereby further inform a skilled artisan about what the claimed PDC is. We reach this conclusion by reading the claims as a whole and in light of the specification. (*Id.* at \*14.)

*US Synthetic* is applicable here because the finding that the patent claims “are not directed to an abstract idea, [but] to a specific, non-abstract composition of matter—a PDC—that is defined by its constituent elements..., particular dimensional information..., and quantified material properties,” warrants a finding of patent-eligible subject matter here. The ’998 patent claims at issue are not abstract, they recite a specific combination of elements, defined by the physical components of the device, with specifications for each component and quantified properties.

***ii. Courts Routinely Deny Motions to Dismiss on Similar Fact Patterns.***

This Court has denied similar motions to dismiss under § 101 and provided reasoning that exemplifies why the claims at issue here are directed toward patent-eligible subject matter.

In *Mirror Imaging, LLC v. PNC Bank, N.A.*, No. W-21-CV-00518-ADA, 2022 WL

229363, at \*6-7 (W.D. Tex. Jan. 26, 2022), this Court denied a motion to dismiss patent claims for “selective archiving and retrieving of financial documents stored in separate electronic storage systems by using an unconventional interface linked to *both* storage systems.” In so doing, the court noted that the Asserted Claims were directed to a specific asserted improvement that prevented a finding of ineligibility under the *Alice* framework. *Id.* The Court emphasized in its analysis that the courts must “remain tethered to the claim language” as “over-generalization can almost always create a high level of abstraction.” *Id.*

The Court also acknowledged that it will almost always be the case that a patent will acknowledge then-known prior art in the context of identifying purported shortcomings of the prior art, and in the process of describing and claiming purportedly inventive embodiments directed to overcoming the shortcomings. *See, id.* at \*7-8, (acknowledging that at the Motion to Dismiss stage, the Court must credit the Plaintiff’s “concrete allegations that ‘individual elements and the claimed combination are not well-understood, routine, or conventional activity.’”) Here, Cardiac’s patents also acknowledge then-known prior art, identify the shortcomings in measuring real-time fitness activity, and describe and claim inventive embodiments directed to the shortcomings. And, for the same reason as in *Mirror Imaging*, Google’s motion to dismiss should be denied – namely, because Cardiac recites specific improvements over the shortcomings of the prior art.

The Federal Circuit has also recently confirmed that claims directed to activity sensing technology that provides real-time information to another device is patentable. In *Contour IP Holding LLC v. GoPro, Inc.*, 113 F.4th 1373 (Fed. Cir. 2024) the Federal Circuit reversed a District Court’s determination on 35 U.S.C. § 101 and found the asserted claims directed to patent-eligible subject matter. The Federal Circuit began its analysis by cautioning against “the practice of “describing the claims at such a high level of abstraction and untethered from the language of the

claims all but ensures that the exceptions to § 101 swallow the rule.” *Id.* at 11 quoting *Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337.

In *Contour IP*, the Federal Circuit found the asserted claims “directed to a specific means that improves the relevant technology,” (*id.* at 10) and simply because the claims “employ known or conventional components that existed in the prior art at the time of the invention... that *alone* does not necessarily mean the claim is *directed* to an abstract idea.” *Id.* (emphasis original).

Like Plaintiff’s claims in this case, the Federal Circuit found “[t]he claims are directed to a technological solution to a technological problem.” *Id.* at 12. Here, Cardiac’s claims are directed to the technological solution to communicating with a trainee during an activity that would otherwise not be able to be communicated with in the same manner using the prior art technologies.

### ***iii. Google Fails to Address Each of the Claims of the ’998 Patent.***

Google additionally fails to meet its burden for dismissal because it did not provide any proof that all 16 claims recite abstract ideas. In fact, Google runs away from the claim language in the 16 claims and instead mischaracterizes one claim as “representative” because Google cannot argue against the clear patent eligibility of the ’998 patent. As set forth above in Section V.A, Defendant has failed to meet the standard of proof with respect to claims 1-11, and 13-16 of the ’998 Patent because it has not presented any analysis of those claims whatsoever.

### ***D. Google Fails to Prove Step Two of Alice.***

The claims of the ’998 patent are also eligible at *Alice* step two because they provide an inventive concept both “in the recited components individually as well as in their arrangement and interaction with one another as a system.” *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1318 (Fed. Cir. 2016).

Claims contain an “inventive concept” when the limitations involve more than “well-understood, routine, conventional activity” previously engaged in by those in the field. *Alice*, 573

U.S. at 225. An invention that “improve[s] an existing technological practice,” or “solve[s] some technological problem in conventional industry practice” fits this definition. *Id.* at 223. The Federal Circuit has repeatedly found eligible claims that recite an unconventional arrangement of conventional components, such as “inertial sensors” (*Thales*, 850 F.3d at 1348), a “processor” (*DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1249 (Fed. Cir. 2014)), and a “remote ISP server” (*Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016)). Indeed, these claims have been determined to be patent eligible because they yielded a different or better result than prior art systems.

At the motion to dismiss stage, step two of *Alice* requires only a “plausible reading of the patents by which one could find that the plaintiff’s [claim] involves an inventive concept.” *Oxford Immunotec Ltd. v. Qiagen, Inc.*, No. 15-cv-13124, 2016 WL 5746639 (D. Mass. Aug. 31, 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (“plausible factual allegations may preclude dismissing a case under § 101 where, for example, ‘nothing on th[e] record ... refutes those allegations as a matter of law or justifies dismissal under Rule 12(b)(6).’”), quoting *Bascom Glob.*, 827 F.3d at 1352.

Plaintiff’s claims easily meet this standard, as the claims and specification explain that instructors and trainees can receive improved sport instruction that was not previously available through conventional means. For example, the ’998 invention allows real-time data and feedback that includes previously unmeasurable information such as “instantaneous speed during the laps, hand or leg lifting heigh for each stroke, distance traveled for each stroke, comparative results to other participants.” (’998 patent 12:40-42.) All this information is collected, measured and “presented to the participant in real-time, i.e. in the course of the activity and during the time the corresponding measurements are being taken.” (*Id.* at 13:45-48.) The ’998 patent specification

and claims use the sensing unit, processor, and presentation unit in a new and unconventional way to solve the problems of providing accurate real-time feedback to a trainee during training.

Here, the Court must accept as true the statements in the patent that the claims are directed at improvements over traditional methods to provide feedback to a trainee. *See FairWarning*, 839 F.3d at 1097. Defendant has not presented any contrary evidence. Google cites no evidence that providing real-time feedback to a trainee through the use of repeated measurement and processing of data is well-understood, routine, and conventional. Rather, Google oversimplifies the '998 claims as merely “the abstract idea of collecting, analyzing, transmitting, and presenting/displaying information.” Motion at 3. This position ignores the specific elements of the claim and fails to rule out a plausible reading that the '998 patent discloses an inventive concept. *See Aatrix*, 882 F.3d at 1128 (“[I]n this case, that question cannot be answered adversely to the patentee based on the sources properly considered on a motion to dismiss, such as the complaint [and] the patent.”). Google has failed to prove step two of *Alice*.

#### ***V. PERMANENT INJUNCTION (GROUND #2)***

Plaintiff concedes that the Complaint does not currently plead factual allegations sufficient to support a request for injunction in this case. Plaintiff therefore requests that those portions of the Complaint that seek entry of a permanent injunction be dismissed without prejudice: specifically, Prayer for Relief, Item B (ECF No. 1 at p. 8). If discovery reveals facts sufficient to support a permanent injunction, Plaintiff may seek leave to amend in the future.

#### ***VI. INDIRECT INFRINGEMENT (GROUND #3)***

Defendant’s Motion to Dismiss the indirect infringement claims should be dismissed as moot in light of the Joint Notice of Dismissal Without Prejudice of CardiacSense Ltd.’s Indirect and Willful Infringement Claims (ECF #19), filed on February 17, 2025. That Joint Dismissal was filed before the Motion to Dismiss was filed and was done pursuant to this Court’s Standing Order

Governing Proceedings, which mandates the dismissal of such claims without prejudice. (*See, id.*) Plaintiff therefore requests that Ground No. 3 of the Motion be denied as moot.

#### ***VII. PRE-SUIT DAMAGES (GROUND #4)***

It is axiomatic that the patent marking requirement of 35 U.S.C. § 287 applies only to patent owners who make, offer for sale, or sell patented articles within the United States. Where there is no patented article made, sold, or offered for sale, there is nothing to mark with the patent number and thus no limitation on damages. *Texas Dig. Sys. v. Telegenix, Inc.*, 308 F.3d 1193, 1220 (Fed. Cir. 2002) (“The recovery of damages is not limited where there is no failure to mark, i.e., where the proper patent notice appears on products or where there are no products to mark.”). Thus, where the patent owner has never commercialized the patented invention, as is the case with here, the patent marking statute is inapplicable because compliance is achieved by doing nothing at all.

In *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1357 and 1366 (Fed. Cir. 2017), the Court addressed a post-trial motion for judgment as a matter of law arguing that the patent owner had failed to mark licensed products that had unquestionably been made, sold, or offered to sell in the United States, and thus compliance with the marking statute was required. *Arctic Cat* therefore starts with the factual predicate that patented products exist. That court also held that “an alleged infringer who challenges the patentee’s compliance with § 287 bears an initial burden of production to articulate the products it believes are unmarked ‘patented articles’ subject to § 287.” *Id.* at 1368. Google has not met this initial burden here.

The *Arctic Cat* case does not hold that a patentee must always provide an affirmative statement in the Complaint that it has complied with the patent marking statute. To the contrary, 35 U.S.C. § 287 clearly states that the limitation on damages applies *only* when there are patented articles. The statute neither states nor even hints that the patent owner must affirmatively state that no such patented products exist; therefore the patent marking statute does not apply here.



Nor are the outlier cases cited by Defendant for this proposition authoritative. *See* Motion at 20. First, in *Ortiz & Assocs. Consulting, LLC v. VIZIO, Inc.*, No. 3:23-CV-00791-N, 2023 WL 7184042, at \*3 (N.D. Tex. Nov. 1, 2023), the court dealt with an expired patent that had been licensed to defendants in previous cases. *Ortiz* at \*3. With Defendant’s “initial burden” of identifying the alleged patented products satisfied, the motion to dismiss was granted because the patent owner had failed to plead compliance with the marking statute in the FAC or SAC. *Id.* Defendant has not shown that any such patented articles exist in this case, nor has Plaintiff repeatedly failed to include a statement of compliance in amended complaints. Likewise, in *Express Mobile, Inc. v. Liquid Web, LLC*, No. 1:18-CV-01177-RGA, 2019 WL 1596999, at \*2 (D. Del. Apr. 15, 2019), the Court recognized that “compliance is achieved, factually, by doing nothing at all.” 2019 WL 1596999 at \*2. It would be contrary to the plain language of the statute to require a plaintiff to plead compliance with the marking statute when there is no reason to believe that any patented articles exist.

To the extent that the Court reads 35 U.S.C. § 287 as requiring an affirmative statement of compliance with the statute at the pleading stage, justice requires that Plaintiff be afforded an opportunity to amend the Complaint to add a statement of compliance. Fed. R. Civ. P. 15(a)(3).

### ***VIII. CONCLUSION***

For all the reasons, this Court should deny Defendant’s motion to dismiss. In the alternative, if the Court finds the complaint for patent infringement insufficient, Plaintiff asks for leave to file an amended complaint to provide a more detailed explanation of Google’s infringement of all asserted claims and the separate reasons that each asserted claim is directed toward patent-eligible subject matter. Such amendment would not be futile, because, as detailed herein, there are numerous examples of transformative technological enhancements provided in the specification that are not specifically recited in the pleadings.

Dated: March 3, 2025

Respectfully submitted,

By: /s/ Benjamin C. Deming

Benjamin C. Deming

DNL ZITO

3232 McKinney Ave, Suite 500

Dallas, TX 75204

214-799-1145

bdeming@dnlzito.com

Joseph J. Zito

DNL Zito

1250 Connecticut Avenue, NW

Ste 700

Washington, DC 20036

202-466-3500

Email: jjzito@dnlzito.com

*Attorneys for CardiacSense, Ltd.*